

Appln. No. 10/780,360
Amendment dated September 11, 2006
Reply to Office Action of June 14, 2006

Amendments to the Specification:

Please replace the paragraph beginning at page 14, line 1, with the following rewritten paragraph:

FIG. 8 illustrates the calculation of the rate of the peaks in the SC signal, i.e. noxious events, at step 64. First, the SC signal data is derived (differentiated) in order to extract the peaks from the SC signal data (step 81). Each peak in the derivative signal data then indicates a sympathetical activation, i.e. activity in the sympathetical nervous system. Since in the unconscious state the magnitude of an activation is very small, the small values of the derivative signal data are first enhanced in order to facilitate the counting of the events. The dynamics of the derivative signal data is therefore suppressed at step 82. This may be implemented, for example, by amplifying the signal data by a sigmoid function producing input-output characteristics according to FIG. 9. As can be seen from the input-output characteristics, high input signal values are attenuated in comparison to low input signal values.